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REMARKS

Claims 1, 7, 11, and 17 are amended. Claims 15 and 19 are canceled without prejudice or disclaimer. No new matter is added by these amendments. Claims 1-14, 16-18 and 20 are pending. Applicant respectfully requests reconsideration and allowance of all claims in view of the amendments above and the remarks that follow.

Examiner Interview

Applicant acknowledges the interview between the Examiner and the undersigned attorney on May 3, 2006, during which the Office Action and claims were discussed.

Claim Objections

Claims 1-20 are objected to for not stating the intended use of the invention. Independent claims 1, 7, 11, and 17 are amended to recite an intended use in the preamble.

35 U.S.C. 112 Rejections

Claims 1-6 are rejected under 35 U.S.C. 112 as indefinite because "cannot determine the scope of applicant's invention." Claim 1 is amended to recite "interrogating a netlist, wherein the netlist comprises a source, a sink, and an inverting buffer associated with the source," which particularly points out and distinctly claims the subject matter which applicant regards as the invention.

Claims 1-10 and 15 are rejected under 35 U.S.C. 112 for omitting essential structural cooperative relationships of elements because in claim 1 "where is the origin of the inverting and non-inverting signal." Applicant respectfully traverses this grounds for rejection. Claim 1 recites "the source is to send both inverting and non-inverting signals

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from the source to the sink.” Thus, the origin of the inverting and non-inverting signals is the source.

Claim 3 is rejected because “the origin and destination of the inverting and non-inverting signals are unclear.” Applicant respectfully traverses this grounds for rejection. Claim 3 recites: “at least a first route of the plurality of routes is to send the inverting signals from the source to the sink and at least a second route of the plurality of routes is to send the non-inverting signals from the source to the sink.” Thus, the origin of the inverting and non-inverting signals is the source and the destination of the inverting and non-inverting signals is the sink.

Claim 7 is rejected because “it is unclear how the inverting and non-inverting signals relate to the rest of the claim.” Applicant respectfully traverses this grounds for rejection. The source (referenced in the “means for finding” and the “means for removing” in claim 7) sends the inverting and non-inverting signals, so the inverting and non-inverting signals are related to the “means for finding” and the “means for removing.” The “means for adding” in claim 7 recites that the inverting signals are sent on the first route that connects the source to the sink, and the non-inverting signals are sent on the second route from the source to the sink, so the inverting and non-inverting signals are related to the “means for adding.” Thus, the inverting and non-inverting signals relate to all elements in claim 7.

Claim 15 is rejected because “the specification does not clarify how the source and sink are on a chip without floorplans.” Claim 15 is canceled without prejudice or disclaimer, so the rejection is moot.

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35 U.S.C. 102 Rejections

Claims 11-16 are rejected under 35 U.S.C. 102(b) as being anticipated by US 2004/0107408 to Sano. Applicant respectfully traverses these grounds for rejection because all of the claim elements are not taught or suggest by Sano.

Claim 11 recites: "interrogating a netlist, wherein the netlist comprises a source, a sink, and the inverting buffer associated with the source; and moving the inverting buffer from the source to the sink in the netlist if the source is to send both inverting and non-inverting signals from the source to the sink."

In contrast, Sano at paragraph [0038] recites that "flip-flop cells are moved from initial placement positions to the placement restriction area." But, the Sano initial placement positions (described at paragraph [0027] and illustrated in Fig. 53) are not connected to the Sano placement restriction area (described at paragraph [0030] and illustrated in Fig. 55), so Sano does not send inverting and non-inverting signals from its initial placement positions to its placement restriction area. Thus, Sano does not teach or suggest "the source is to send both inverting and non-inverting signals from the source to the sink," as recited in claim 11.

In addition, the Office Action admits that "the prior art does not teach moving an inverting buffer from a source to a sink in a netlist if both inverting and non-inverting signals are to be sent from the source to the sink," which is recited in claim 11.

Claims 12, 13, 14, and 16 are dependent on claim 11 and are patentable over Sano for the reasons argued above, plus the elements in the claims.

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35 U.S.C. 103 Rejections

Claims 7-10 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sano in view of US 6,205,572 to Dupenloup. Applicant respectfully traverses these grounds for rejection because all of the claim elements are not taught or suggest by Sano and Dupenloup.

Claim 7 recites: "means for moving the inverting buffer from the source to the sink in the netlist if the source is to send both inverting and non-inverting signals from the source to the sink."

Sano does not teach or suggest "moving the inverting buffer from the source to the sink in the netlist if the source is to send both inverting and non-inverting signals from the source to the sink," as recited in claim 7 for the reasons previously argued above. Dupenloup also does not teach or suggest "moving the inverting buffer," as recited in claim 7 because Dupenloup does not move its inverters, and the Office Action does not rely on Dupenloup for such an element.

In addition, the Office Action admits that "the prior art does not teach moving an inverting buffer from a source to a sink in a netlist if both inverting and non-inverting signals are to be sent from the source to the sink," which is recited in claim 7.

Thus, the combination of Sano and Dupenloup does not teach or suggest "means for moving the inverting buffer from the source to the sink in the netlist if the source is to send both inverting and non-inverting signals from the source to the sink," as recited in claim 7.

Claims 8-10 are dependent on claim 7 and are patentable over the references for the reasons argued above plus the elements in the claims.

Claim 17 recites: "moving the inverting buffer from the source to the sink in the netlist if the source is to send both inverting and non-inverting signals from the source to

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the sink.” Claim 17 contains similar elements as previously argued above for claims 1, 7, and 11, and is patentable over the references for similar reasons. Claims 18 and 20 are dependent on claim 17 and are patentable over the references for the reasons argued above plus the elements in the claims.

Allowable Claims

Claims 1-6 are allowable if amended to overcome the 35 U.S.C. 112 rejections.

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Conclusion

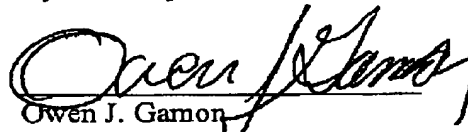
Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (651-645-7135) to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 09-0465.

Respectfully submitted,

Robert F. Lembach, et al.

By their Representative,


Owen J. Gamon
Reg. No. 36,143
(651) 645-7135

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IBM Corporation
Intellectual Property Law
Dept. 917, Bldg. 006-1
3605 Highway 52 North
Rochester, MN 55901

CERTIFICATE UNDER 37 CFR 1.8: I hereby certify that this correspondence is being transmitted via facsimile to the Commissioner for Patents 571-273-8300, on this 9th day of May, 2006.

Owen J. Gamon
Name


Signature